

REMARKS

Claims 17-28 are now pending in the application. Claims 1-16 have been cancelled. Claims 17-28 have been added. No new matter has been added by the amendments.

Claims 1-4 and 5-16 were rejected under 35 U.S.C. § 101 for being directed to non-statutory subject matter. Claims 1-16 have been cancelled and replaced by new claims 17-28, thereby rendering the rejection moot. New claims 17-28 are directed to a fibre, a method of using the fibre in a display, and a display comprising the fibre, and thus recite statutory subject matter.

Claims 1-4 and 5-16 were also rejected under 35 U.S.C. § 112, second paragraph, as indefinite. The cancellation of claims 1-16 also renders this rejection moot. New claims 17-28 have been drafted in a manner to obviate a further rejection under § 112.

Claims 1, 2, 5, 6, 10-12, 15, and 16 were rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Pat. No. 5,579,429 (Naum). Claims 3, 4, 13, 14 and 16 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Naum, and claims 7-9 were rejected under 35 U.S.C. 103(a) as being unpatentable over Naum in view of U.S. Pat. No. 6,124,046 (Jin *et al.*). New claims 17-28 are deemed patentable over the art of record for the following reasons.

The claimed invention provides an optical fibre that is a highly efficient generator of fluorescent light when operating in daylight or sunlight. The claimed optical fibre is suitable for applications such as providing pixels in a visual display. Such an optical fibre is nowhere disclosed in the art of record. Furthermore, a display comprising a plurality of such optical fibres is not disclosed in the art.

The claimed optical fibre is capable of generating fluorescent light without the use of external electrical power. As such, the claimed optical fibre is fundamentally different from electro-luminescent devices, in which a stream of electrons must strike the light emitting material directly. The claimed optical fibre, in contrast to electro-luminescent devices, reduces consumption of electrical power and reduces the effects of aging and degradation caused by a current flowing through the light-emitting material in the electro-luminescent device.

Naum does not disclose or suggest the optical fibre of the present invention. The optical fibres of Naum are large fibres (column 4, lines 28-30) suitable for large signs (column 1, lines

47-48), and as such are not suitable for use as light emitting pixels in an array. Furthermore, the optical fibres of Naum are designed to produce side illumination, *i.e.*, a bright glowing neon-like effect. Although Naum mentions that the fibres may fluoresce from exposure to sunlight, because the fibres in question are designed to emit side-illumination they would not, on exposure to light, be able to produce an end-emission of fluorescent light that would have an intensity ratio to that of the ambient light of greater than 10:1 as recited in new claim 17.

For at least those reasons, the invention as claimed in new claims 17-28 is novel over Naum.

The examiner's secondary reference, Jin *et al.*, relates to electro-luminescent devices that require the application of an electrical current to the device material in order to generate light. As explained above, such devices are fundamentally different not only from the claimed optical fibre, but also from the display device disclosed in Naum. Because of those fundamental differences, a person of *ordinary* skill in this art would not seek to combine the teachings of the two references. Furthermore, even assuming, for purposes of argument, that a person of ordinary skill were to ignore the differences between the devices of Naum and Jin *et al.*, and attempt to combine their teachings, the combination of the two references still lacks any teaching or suggestion of an optical fibre having the ratio between the light power density at the end of the fibre and the light power density of the ambient light, as recited in new claim 17.

U.S. patent 5,281,489 (Mori *et al.*) was not applied against the originally presented claims, which is proper because it is not relevant to the claimed inventions. More *et al.* also relates to electro-luminescent devices and accordingly differs fundamentally from both the claimed invention and the disclosure of Naum.

In view of the foregoing remarks, it is submitted that the invention as claimed in newly presented claims 17-28 is both novel and nonobvious over the art cited by the Examiner.


CONCLUSION

Based upon the foregoing, the application is believed to be in condition for allowance. Withdrawal of all rejections and objections, and an early notice of allowance of claims 17-28 are earnestly solicited.

Respectfully submitted,

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